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PTO/SB/21 (08-08)

Approved for use through 08/30/2003. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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## TRANSMITTAL FORM

*(to be used for all correspondence after initial filing)*

		Application Number	10/663,174
		Filing Date	September 15, 2003
		First Named Inventor	John Santhoff
		Art Unit	2661
		Examiner Name	to be assigned
Total Number of Pages in This Submission		Attorney Docket Number	048-111

ENCLOSURES (Check all that apply)			
<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Dep. Acc. Authorization <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Appendix <input type="checkbox"/> Ext. of Time Request <input type="checkbox"/> Fee Attached <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input checked="" type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): <b>Return Receipt Postcard</b> <b>Check #10311 for \$130.00</b> <b>Declaration of Co-Inventor</b>	Remarks <p><b>The Commissioner is hereby authorized to charge any additional fees due in connection with this submission to Deposit Account 50-3143, in the name of Pulse-LINK, Inc.</b></p>

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Peter R. Martinez, Reg. No. 42,845
Signature	
Date	July 1, 2004

### CERTIFICATE OF TRANSMISSION/MAILING

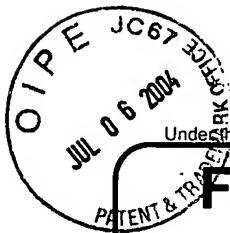
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Jill Benrey	
Signature		Date July 1, 2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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# FEET TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 130.00)

## Complete if Known

Application Number	10/663,174
Filing Date	September 15, 2003
First Named Inventor	John Santhoff
Examiner Name	to be assigned
Art Unit	2661
Attorney Docket No.	048-111

## METHOD OF PAYMENT (check all that apply)

 Check  Credit card  Money Order  Other  None
 Deposit Account:

Deposit Account Number	503143
Deposit Account Name	Pulse~LINK, Inc.

The Director is authorized to: (check all that apply)

Charge fee(s) indicated below  Credit any overpayments  
 Charge any fee(s) due during the pendency of this application  
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

## 1. BASIC FILING FEE

Large Entity	Small Entity	Fee Description	Fee Paid
Fee Code (\$)	Fee Code (\$)		
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1) (\$)			

## 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent	-20** =	X 9	=
Claims	- 3** =	X 43	=
Multiple Dependent			

Large Entity	Small Entity	Fee Description
Fee Code (\$)	Fee Code (\$)	
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent
SUBTOTAL (2) (\$)		

\*or number previously paid, if greater; For Reissues, see above

## 3. ADDITIONAL FEES

Large Entity	Small Entity	Fee Description	Fee Paid
Fee Code (\$)	Fee Code (\$)		
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	130.00
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 130.00)

## SUBMITTED BY

(Complete if applicable)

Name (Print/Type)	Peter R. Martinez	Registration No. (Attorney/Agent)	42,845	Telephone	760-607-0844
Signature				Date	July 1, 2004

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

John SANTHOFF et al. ) Group Art Unit: 2661  
Serial No.: 10/663,174 )  
Filed: September 15, 2003 ) Examiner: to be assigned  
For: ULTRA-WIDEBAND )  
COMMUNICATION PROTOCOL )

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Carlsbad, California

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

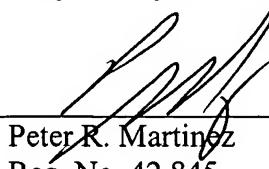
**PETITION TO MAKE SPECIAL**

1. This is a Petition to Make Special, submitted under 37 C.F.R. § 1.102 and MPEP 708.02.
2. This Petition is being submitted because the present invention relates to counter-terrorism.
3. The justification for this Petition is more fully explained in the enclosed declaration of John H. Santhoff, a co-inventor.

4. A check in the amount of \$130.00 is enclosed as required by 37 C.F.R. § 1.102(d) and 37 C.F.R. § 1.17(h). If this check is missing or incorrect in amount, the Commissioner is hereby authorized to charge any deficit or credit of overpayment to Deposit Account No. 50-3143.

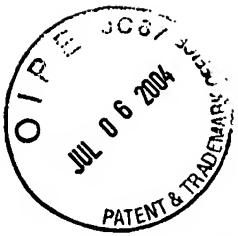
7.1.04  
Date

Respectfully submitted,

  
Peter R. Martinez  
Reg. No. 42,845

Pulse~LINK, Inc.  
1969 Kellogg Avenue  
Carlsbad, CA 92008

Telephone: 760-607-0844  
Facsimile: 760-607-0861



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: )  
                        )  
                        )  
                        John SANTHOFF et al.      ) Group Art Unit: 2661  
                        ) )  
Serial No.:    10/663,174                      ) )  
                        ) ) Examiner: to be assigned  
Filed:         September 15, 2003              ) )  
                        ) )  
For:           ULTRA-WIDEBAND                    ) )  
                 COMMUNICATION PROTOCOL            ) )  
                        ) )  
                        ) )

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Carlsbad, California

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**DECLARATION OF JOHN H. SANTHOFF**

I, John H. Santhoff, declare as follows:

**The Subject of Invention**

I am a co-inventor of the above-captioned patent application.

This invention relates to ultra-wideband communications, and specifically provides compatibility and interoperability between ultra-wideband communications devices within various types of networks. In one embodiment, combined, or interleaved data frames having both high and low data transfer rate capability are provided. The low data transfer rate may be used for initial discovery of the type of network that is being accessed, and the high data transfer rate may be used to quickly transfer data within networks that have a high data transfer rate

capability. The present invention may be employed in any type of network, be it wireless, wire, or a mix of wire media and wireless components.

### **The Subject Invention relates to Counter-Terrorism**

The present application should be made "special" and advanced out of turn for examination because the subject invention relates to counter-terrorism.

As disclosed in the specification, ultra-wideband technology employs discrete pulses of electromagnetic energy that are emitted at, for example, nanosecond or picosecond intervals. For this reason, ultra-wideband (UWB) is often called "impulse radio." That is, the UWB pulses are transmitted without modulation onto a sine wave carrier frequency, in contrast with conventional radio frequency technology. As shown in FIG. 2 of the patent application, the narrower the UWB pulse in time, the broader the spread of its frequency spectrum. This is because bandwidth is inversely proportional to the time duration of the UWB pulse. Because UWB pulses are spread across an extremely wide frequency range or bandwidth, UWB communication systems allow communications at very high data rates, such as 100 megabits per second or greater.

The assignee of the present invention (Pulse-Link, Inc.) is developing an airport surveillance system that can provide a Transport Security Administration (TSA) officer with a device that can receive wireless video data from multiple video cameras. Conventional carrier wave technology cannot transmit multiple video signals wirelessly.

The unique capabilities of UWB technology were recognized by Federal Communications Commissioner (FCC) Michael J. Copps who stated: "the U.S. Government already uses UWB extensively to make our soldiers, airport runways, and highway bridges safer." To that end, the U.S. Government is interested in deploying UWB technology in U.S. airports to provide counter-terrorism security measures.

### Conclusion

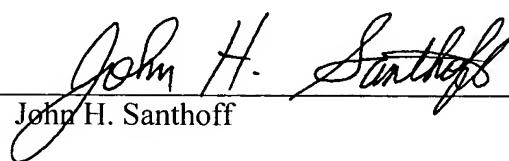
In summary, the present application should be made special because the subject invention relates to counter-terrorism.

I hereby declare that all settlements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted,

6-30-2004

Date

  
John H. Santhoff